

MIZORAM SCIENCE, TECHNOLOGY & INNOVATION COUNCIL
(MISTIC)

Mizoram New Capital Complex Khatla,
Aizawl

Contact : 7086691049/0389-2336486

QUOTATIONS
FO 78R
SUPPLY AND INSTALLATION OF EQUIPMENT AT
PHAIBAWK, SELING UNDER THE PROJECT
'FOSTERING SDG NO.9

**BID INSTRUCTIONS,
TERMS & CONDITIONS, SPECIFICATIONS**

BID INSTRUCTION:

1. Quotations will have to be submitted in two Bids i.e. Technical Bid and Financial Bids and must be kept separately in two sealed envelopes specifically mentioning “Technical Bid” and “Financial Bid” on the cover of the envelopes. Further these two sealed Bids must be kept inside one big sealed envelope before submitting it.

The address of the firm submitting the quotation and the Office to whom the quotation is addressed must appear distinctly on sealed covers. Further, on sealed cover, the following are to be written:

QUOTATIONS FOR SUPPLY & INSTALLATION OF EQUIPMENT AT
PHAIBAWK, SELING FOR THE PROJECT FOSTERING SDG NO.9

2. **Submission of Compliance Certificate:** Duly filled and signed Compliance (as per formats at ANNEXURE-I (A&B) are must with the Technical bid.
3. **Bid not transferable:** The bid documents are not transferable and the seal and signature of the authorized official of the firm’s must appear on all the papers and envelopes submitted.

QUALIFICATION REQUIREMENTS:

1. The Bidder should be an Original Equipment Manufacturer (OEM) or a firm of reputation having sufficient expertise and experience in the subject tender with sound warranty / service support capability.
2. The Bidder should have certification for Analytical Instrument Qualification and must enclose the supporting document.
3. The Bidder will assume total responsibility in packing, forwarding, installation and for the fault-free operation and maintenance during warranty period.
4. Bidders who do not meet the criteria given above are subject to be disqualified, if they have made untrue or false representation in the forms, statements and attachments submitted in proof of the qualification requirements or have a record of poor performance, not properly completing the contract, inordinate delays in completion or financial failure, etc.

MISTIC TERMS & CONDITIONS:

1. **Rates:** Rates quoted in the **Price Bid** should be as per details below:

Sl No.	Particulars	Rate
I	Basic Price (per unit)	
II	Packing, Transportation, Transit Insurance, Installation etc.	
III	Taxes	
IV	Grand Total for the Item at MFPRC, Phaibawkkawn, Seling, Mizoram - 796161	

2. **Validity of Quotation:** Quoted rates must be valid for **1 year** from the date of quotation.
3. **Warranty:** The quoted equipment and components must be warranted for a minimum of 1 (One) Year of period specified against the item.
4. **Literature a must:** All the quotations for all the must be supported by the printed technical leaflet/literature and the specifications mentioned in the quotation must be reflected/supported by such printed technical leaflet/literature. The model and specifications quoted may **invariably be highlighted** in the leaflet/literature for easy reference.
5. **After Sales Service:** Vendors should clearly state the available nearest after sales service facilities in the region or state how after sales service is to be done, without which their offers will be rejected.
6. **Earnest Money:** Refundable earnest money deposit (EMD) @2% of the Quoted Value through demand draft drawn at the State Bank of India only in favour of “The Member Secretary, Mizoram Science, Technology & Innovation Council (MISTIC)”, payable at Aizawl, will have to accompany the technical Bid. The EMD of unsuccessful bidder will be released after selection of bidder; on submission of the Performance Bank Guarantee by successful bidder as well. Offers received without Earnest Money or valid Certificate shall be summarily rejected.
7. **Performance Bank Guarantee (PBG):** The successful bidder shall furnish an unconditional PBG (as per format at **ANNEXURE-II**) for 5% of the Purchase Order value from a scheduled Bank of India, after receiving the purchase order. The PBG will be kept till the Warranty Period and the PBG shall guarantee that,
- (a) The Vendor guarantees satisfactory operation of the equipment & components against poor workmanship, bad quality of materials used, faculty designs and poor performance.
- (b) The Vendor shall, at his own cost, rectify the defects/replace the items supplied, for defects identified during the period of guarantee.
8. **Delivery**
- a) **Time limit:** Maximum within 12 Weeks from the date of issue of this purchase order.
- b) **Safe Delivery:** All aspects of safe delivery shall be the exclusive responsibility of the vendor. At the destination site i.e. Phaibawkkawn, Seling, the package will be opened only in the presence of MISTIC user/representative and vendor’s representative. The intact condition of the package and the seal/indicators for not being tampered with, shall form the basis for certifying the receipt in good condition.
- c) **Part Delivery:** Acceptance of part delivery shall be a prerogative of MISTIC.

9. **Genuine Pricing:** Vendor is to ensure that quoted price for the particular item is not more than the price quoted to any other customer in India, particularly to other Government Organization(s).
10. **Conditional tenders not acceptable:** All the terms and conditions mentioned herein must be strictly adhered to by all the vendors. Conditional tenders shall not be accepted on any ground and shall be rejected straightway. Conditions mentioned in the tender bids submitted by vendors will not be binding on MISTIC.
11. **Tax deduction at source:** In case of supply within Mizoram, Tax deduction at source, as per Order/notification of the Govt. of Mizoram will be applicable.
12. **Late and delayed tender:** Late and delayed tender will not be considered. In case any unscheduled holiday occurs on the prescribed closing/opening date the next working day shall be the prescribed date of closing/opening.
13. **Payment:** 50% payment will be made upon submission of letter of acceptance and PBG. 30% payment will be made upon delivery of the item and the rest 20% will be made upon successful installation and demonstration.
14. **Maintenance & Service Contract:** An agreement is to be made between MISTIC & the Manufacturer/Distributor/Dealer for providing Maintenance & service after expiry of the Warranty Period (preferably from the Manufacturer) within 30 days from the day of complaint. Maintenance and service charges will be paid as per the terms of the agreement for the same.
15. **Enquiry during the course of evaluation not allowed:** No enquiry from the bidder(s) shall be entertained during the course of evaluation during the course of evaluation of the tender till final decision is conveyed to the successful bidder(s). However, the Purchase Committee or its authorized representative may make enquiries/seek clarification from the bidders. In such a case, the bidder must extend full co-operation. The bidders may also be asked to arrange demonstration of the offered items, in a short period of notice.
16. The acceptance of the quotation will rest solely with the Member Secretary, MISTIC who in the interest of MISTIC is not bound to accept the lowest quotation and reserves the right to himself to reject or partially accept any or all the quotations received without assigning any reasons.
17. **Force Majeure:**

If the performance of the obligation of either party is rendered commercially impossible by any of the events hereafter mentioned that party shall be under no obligation to perform the agreement under order after giving notice of 15 days from the date of such an event in writing to the other party, and the events referred to are as follows:

 - i. Any law, statute or ordinance, order action or regulations of the Government of India.
 - ii. Any kind of natural disaster, and
 - iii. Strikes, acts of the Public enemy, war, insurrections, riots, lockouts, sabotage.
18. **Applicable Law:**
 - (a) The contract shall be governed by the laws and procedures established by Govt. of India and subject to exclusive jurisdiction of Competent Court and Forum in Aizawl/India only.

(b) Any dispute arising out of this purchase shall be referred to Member Secretary, MISTIC and if either of the parties hereto is dissatisfied with the decision, the dispute shall be referred to the decision of an Arbitrator, who should be acceptable to both the parties, to be appointed by the Member Secretary of the Council. The decision of such Arbitrator shall be final and binding on both the parties.

19. Training:

The vendor will provide free training at Aizawl, Mizoram after successful installation of the Machines/equipment.

ANNEXURE-I

A.COMPLIANCE CERTIFICATE FOR MISTIC TERMS

(To be enclosed in the Technical bid)

SI No.	MISTIC Terms and Conditions	Yes/No
1	Rate quoted as per instruction	
2	Validity of quoted rate for 1 year agreed	
3	EMD submitted	
4	PBG term agreed (If applicable)	
5	Payment term agreed	
6	Delivery terms agreed	
7	Warranty period agreed	
8	Literature: Printed Literature provided (for specified items)	
9	Sales Service: address of after Sales Service in India (for imported goods)/in the region provided	
10	Applicable law terms agreed	

Signature with Seal:

Vendor: M/s.....

A. COMPLIANCE CERTIFICATE FOR SPECIFICATIONS

(One for each item must to be enclosed in the Technical bid)

Name of Item :			
Specifications as per Annexure-III		Quoted Item Specs.*	Complied (Yes/No)
Parameter	Specifications		

Signature with Seal:

Vendor: M/s.....

***Vendor must quote the parameter specification of the quoted product in this column and not just copy the specification from the tender call document. Failure to do so will lead to rejection of the tender.**

ANNEXURE – II

PERFORMANCE BANK GUARANTEE

To:

Mizoram Science, Technology & Innovation Council

WHEREAS.....(Name of Supplier)

Hereinafter called “the Supplier” has undertaken, in pursuance of Contract No dated, 20..... to supply (Description of Goods and Services) hereinafter called “the order”.

AND WHEREAS it has been stipulated by you in the said order that the Supplier shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with the Supplier’s performance obligations in accordance with the order.

AND WHEREAS we have agreed to give the Supplier a Guarantee:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of (Amount of the Guarantee in Words and Figures) and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the order and without cavil or argument, any sum or sums within the limit of (Amount of Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the day of20

Signature and Seal of Guarantors

.....

Date 20

Address:

All correspondence with reference to this guarantee shall be made at the following address :

Mizoram Science, Technology & Innovation Council
Directorate of Science & Technology Building
Mizoram New Capital Complex, Khatla
Aizawl, Mizoram
Pin: 796001

ANNEXURE-III

SPECIFICATIONS OF MACHINE/EQUIPMENT

1. TECHNICAL SPECIFICATIONS FOR ATOMIC ABSORPTION SPECTROPHOTOMETER

Double Beam Atomic Absorption Spectrophotometer with automatic 6 or 8-lamp turret, automatic adjustment of lamp current optimization of light beam position, automatic wavelength scanning and peak picking, automatic spectral bandwidth changing, automatic optimization of position parameters, automatic ignition, automatic gas flow setting, automatic burner and flame optimization.

Optics	Narrow beam Optics. Optics should be fully sealed and mirrors quartz coated
Wavelength range	185-900 nm
Monochromator	Focal length 250 mm or more, preferably Czerny-Turner or equivalent monochromator with computer-controlled wavelength selection
Slits	Automated slit selection. Settings 0.2, 0.5 and 1.0 nm plus one reduced height slit of 0.5 nm
Grating	Holographic blazed grating with line density 1200 lines/mm or more
Dispersion	Better than 2.3 nm/mm
Detector	Photomultiplier Tube or Solid state covering full wavelength range
Detection limits	Cu <0> μg/ml
Background corrector	<ul style="list-style-type: none">• High intensity deuterium background corrector.• Range 185-425 nm to 2.3 Abs
Lamp system	<ul style="list-style-type: none">• Fully software controlled 4 lamp or more.• Fast sequential selection of lamps through software is preferable for less run time and gas consumables
Gas control	<ul style="list-style-type: none">• Fully programmable gas control system.• Rapid regulation for gases. PC controlled gas flow.• Automatic oxidant change over facility should be there
Safety system	<ul style="list-style-type: none">• There should be adequate safety measurement such as separate ignite/flame-off buttons, internal gas connections made automatically, flame shields and protection against heat and UV radiation.• External adjustment of all burner and spray chamber controls.• Violation of any safety interlock should prevent flame ignition or should extinguish existing flame

Flame atomization system	Spray chamber should be fluorinated high density polyethylene design for aqueous and organic solutions
Nebulizer	Adjustable nebulizer with inert platinum/iridium capillary and PEEK venturi for corrosion resistance
Burners	<ul style="list-style-type: none"> • Should be of inert material • Air/acetylene and nitrous oxide/acetylene burner to be offered • Should provide external burner rotation • Should have facility for PC controlled burner adjuster with auto setting of burner height
Performance	>0.9 absorbance with precision of <0.5% RSD, integrations for 5 mg/L Cu solution
Software	<ul style="list-style-type: none"> • Windows based external PC with mouse or keyboard control • Instrument should be able to communicate to the PC via USB, the PC Software should run on Windows 7 and above and should minimum have the following modes of operation: Energy Profile, Emission, Absorbance, Standard Calibration, Standard Addition, Curve Fit options –Liner and Quadratic
Hollow cathode lamps	<ul style="list-style-type: none"> • Coded single and multi-element hollow cathode lamps for analysis of various elements like As, Be, Cu, Fe, Mn, Zn, Na • The lamps should have guaranteed 5000 mA hour of usage time
Warranty	3 years

2. TECHNICAL SPECIFICATIONS FOR GAS CHROMATGRAPHY- MASS SPECTROMETRY

i. GC System

- Gas Chromatograph system to be coupled with solid, metallic quadrupole-based mass chromatographic system with Electron Impact (EI) ionization module
- Flame Ionization Detector (FID) should be provided which can be coupled with the Gas chromatographic system
- System should be capable of supporting two inlets and four detector ports simultaneously, should have electronic pneumatic / pressure controls for all the gases and should have Chromatography Data system which is based on Microsoft Windows operating system for instrument control, data acquisition, data analysis, quantization, automation & customization with online and offline sessions provided
- The GC should be equipped with a touch screen to control and evaluate the instrument parameters and conditions.
- All gases flow should be adjustable/ controlled by software with no manual control
- System should have Gas saver mode to reduce costly gas like helium consumption without compromising performance preferably

ii. Column Oven

- Capable of housing at least two columns
- Temperature set point resolution: 0.1 °C or better
- Operating temperature range: ambient +4 °C to 450 °C or more
- Cool-down time from 450°C to 50°C should be less than 4 minutes
- Temperature programming: should have minimum 15 ramps & 16 plateau

iii. Pneumatic controls

- System must have pneumatic Electric flow control for all injectors and detectors
- The electronics carrier gas controller should allow operating in constant and programmed flow and pressure modes

iv. Chromatographic performance

- Retention time repeatability <0.008% or <0.0008min
- Area repeatability<1%RSD

v. Split/split less Capillary Inlet

- Split/Split less inlet 2 nos
- Temperature ranges up to 400°C or higher and all carrier gases to be automatically controlled from software (AFC/EPC/PPC)
- Fittings suitable for columns of 0.1mmID to 0.53mmID
- Working temperature range: 40 to 400°C or higher with 1°C increment
- Pressure Range: 0-100 psi or more
- At least five step flow/pressure programming
- Split ratio setting: up to 12000:1 or better

vi. Capillary Columns

- 30 m x 0.320 mm ID capillary columns
- 60 m x 0.320 mm ID capillary column for organic compound analysis

vii. Auto Injector-liquid

- An automatic injector device having a capacity to hold at least 15 vials capacity should be provided

viii. GC Detector Specifications (FID)

- FID detector having an MDL: <1.5 pg c/s or better (dodecane)
- Carrier gas head pressure setting should be more than 950 kPa

1. Mass Spectrometer

- Quadrupole should be made up of inert material with hyperbolic shape to have better mass transfer efficiency
- The analyzer should have suitable inbuilt feature to keep it clean from dirty matrix preferably heated quadrupole
- The system should have facility to use hydrogen as carrier gas to reduce cost of operation
- System should have electron multiplier detector with long life and better sensitivity
- The system should have independently heated GC/MS interface
- Mass range (m/z) up to 1000 amu or better
- Mass Analyzer-Metal Quadrupole mass filter with pre rods
- Mass Resolution-minimum 0.7 amu or better

- Ion source temperature up to 350°C or better
- Scan rate (electronic) of 12000 amu or better
- Non coated inert EI source

2. WorkStation Instrument Control Software

- GC and MS system should be integrated with the same workstation for simultaneous settings and programming
- Should have Auto tune (to optimize MS parameters automatically) feature
- A user-friendly automatic data collection and analysis system compatible with Microsoft Windows OS and Microsoft Office suite applications

3. Library

- Latest version of library database (NIST 2023) with license to be supplied with the system

4. Consumables

- Vials and caps & Septa- 100
- EI filament-1
- Ferrules-10
- Column nut- 5
- MS Column nut - 5
- Liner – 5
- Septa - 10
- Autosampler syringe- 2

5. Local accessories to run the system

- Required gas cylinder with double stage regulators, gas purification panel

6. Warranty

- System should have standard three years warranty

7. Delivery

- Vendors should quote final/complete cost to door delivery basis up to Mizoram
- The entire system should be installed by the company professionals at our site. A thorough technical training (minimum 3 days) in analyzing and troubleshooting should be given by the technical professionals